WHAT IS CLAIMED IS:

- 1. An electronic digital pressure switch for detecting a gas pressure and generating an output, comprising:
- a housing that has a ventilating portion allowing a gas to pass therethrough.
 - 2. The electronic digital pressure switch according to Claim 1, wherein the ventilating portion is provided at an upper position of the housing when detecting the pressure of a gas that is lighter than air, while the ventilating portion is provided at a lower position of the housing when detecting the pressure of a gas that is heavier than air.

15

10

5

3. The electronic digital pressure switch according to Claim 1, the ventilating portions are provided at both upper and lower positions of the housing.

20

- 4. An electronic digital pressure switch for detecting pressures and generating outputs, comprising:
- a contact output that turns ON/OFF according to detected pressures and that allows ON and OFF values to be set:

25

a display means that digitally displays detected pressures and also digitally displays ON/OFF values of the contact output by switching an operation mode; and

an analog output that changes its output values according to detected pressures.

- The electronic digital pressure switch
 according to Claim 4, comprising a plurality of the contact outputs.
 - 6. The electronic digital pressure switch according to Claim 4 or Claim 5, wherein delay time can be set for the contact output or the contact outputs.
 - 7. An electronic digital pressure switch for detecting pressures and generating outputs, comprising:

10

- a contact output that turns ON/OFF according to

 15 detected pressures and that allows ON and OFF values to be
 set;
 - a display means that digitally displays detected pressures and also digitally displays ON/OFF values of the contact output by switching an operation mode;
- a terminal board for connecting an external wire to the contact output; and
 - an analog output that changes its output values according to detected pressures,
- wherein the analog output is directly drawn out
 from a substrate.
 - 8. The electronic digital pressure switch

according to Claim 7, comprising

a plurality of the contact outputs,

wherein the terminal board has as many poles as the number of the contact outputs and power sources.

5